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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/880,532	06/13/2001	Martin L. Anderson	20010202.ORI	5010

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EXAMINER

KRECK, JOHN J

ART UNIT	PAPER NUMBER
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3673

DATE MAILED: 04/03/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/880,532

Applicant(s)

ANDERSON, MARTIN L.

Examiner

John Kreck

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

Claim 1 is objected to because of the following informalities: in line 4, please change "axel" to "axle". Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 9 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 9 and 10 recite the limitation "the pair of drive wheels". Note that previously, "ground-engaging" wheels were claimed. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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1. Claims 1-13, 15, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson, et al. (U.S. Patent number 4,162,809) in view of Fisher (U.S. Patent number 5,426,805).

Anderson shows a floor-stripping machine comprising a main body with wheels; a floor engaging cutting head member attached to the main body; and an electric motor mounted on the main body and mechanically connected to the cutting head member. The Anderson device is not self propelled, and fails to show the drive axle, drive wheels, hydraulic pump, reservoir, pressure outlet, hydraulic valve, hydraulic motor, and output shaft.

Fisher shows a similar device which is self-propelled and incorporates a drive axle (100) attached to drive wheels (12), hydraulic pump (30) attached to the main body and which is driven by the motor of the device, the pump coupled to a hydraulic fluid reservoir (16), the pump having an inlet coupled to the reservoir, and a pressure outlet coupled through a hydraulic valve to a hydraulic motor, the hydraulic motor having an output shaft coupled to the axle for driving the drive wheels. It is readily apparent that hydraulic components in combination with the drive axle reduce operator fatigue.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the Anderson device to have a drive axle attached to drive wheels, hydraulic pump attached to the main body and which is driven by the motor of the device, the pump coupled to a hydraulic fluid reservoir, the pump having an inlet coupled to the reservoir, and a pressure outlet coupled through a hydraulic valve to a hydraulic motor, the hydraulic motor having an output shaft coupled to the axle for

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driving the drive wheels as called for in claim 1, and as taught by Fisher, in order to reduce operator fatigue.

With regards to claim 2; Fisher teaches the valve controls the direction of rotation of the drive wheels; thus it would have been obvious to one of ordinary skill in the art at the time of the invention to have further modified the Anderson device to have included the valve controlling the direction of rotation of the drive wheels as called for in claim 2, in order to reduce operator fatigue.

With regards to claim 3; Fisher teaches the valve controls the speed of rotation of the drive wheels; thus it would have been obvious to one of ordinary skill in the art at the time of the invention to have further modified the Anderson device to have included the valve controlling the speed of rotation of the drive wheels as called for in claim 3, in order to reduce operator fatigue.

With regards to claim 4; Fisher teaches the valve controls the speed of rotation of the drive wheels; thus it would have been obvious to one of ordinary skill in the art at the time of the invention to have further modified the Anderson device to have included the valve controlling the speed of rotation of the drive wheels as called for in claim 4, in order to reduce operator fatigue.

With regards to claim 5, Anderson shows the handle.

With regards to claim 6; Fisher teaches the valve in the handle; thus it would have been obvious to one of ordinary skill in the art at the time of the invention to have further modified the Anderson device to have included the valve in the handle as called for in claim 6, in order to reduce operator fatigue.

Regarding independent claim 7:

Anderson shows a floor-stripping machine comprising a frame, an axle having a pair of wheels; a scrapper blade assembly resiliently mounted to the frame; and an electric motor mounted on the main body and mechanically connected to the cutting head member. The Anderson device is not self propelled, and fails to show the hydraulic circuit.

Fisher shows a similar device which is self-propelled and incorporates a hydraulic circuit including a hydraulic pump, fluid reservoir, motor and control valve mechanism, the pump driven by the motor of the device to circulate hydraulic fluid from the reservoir to the motor via the valve mechanism and the motor coupled in driving relation to the axle. It is readily apparent that hydraulic circuit reduces operator fatigue.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the Anderson device to have a hydraulic circuit including a hydraulic pump, fluid reservoir, motor and control valve mechanism, the pump driven by the motor of the Anderson device to circulate hydraulic fluid from the reservoir to the motor via the valve mechanism and the motor coupled in driving relation to the axle as called for in claim 7, and as taught by Fisher, in order to reduce operator fatigue.

With regards to claim 8; Fisher teaches the valve controls the direction of rotation of the ground engaging wheels; thus it would have been obvious to one of ordinary skill in the art at the time of the invention to have further modified the Anderson device to

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have included the valve controlling the direction of rotation of the ground engaging wheels as called for in claim 8, in order to reduce operator fatigue.

With regards to claim 9; Fisher teaches the valve controls the speed of rotation of the ground engaging wheels; thus it would have been obvious to one of ordinary skill in the art at the time of the invention to have further modified the Anderson device to have included the valve controlling the speed of rotation of the ground engaging wheels as called for in claim 9, in order to reduce operator fatigue.

With regards to claim 10; Fisher teaches the valve controls the speed of rotation of the ground engaging wheels; thus it would have been obvious to one of ordinary skill in the art at the time of the invention to have further modified the Anderson device to have included the valve controlling the speed of rotation of the ground engaging wheels as called for in claim 10, in order to reduce operator fatigue.

With regards to claim 11; Fisher teaches the safety valve (32); thus it would have been obvious to one of ordinary skill in the art at the time of the invention to have further modified the Anderson device to have included the safety valve as called for in claim 11, in order to provide additional safety.

With regards to claim 12; Fisher teaches the valve (32) provides fluid flow from the pump to the tank; thus it would have been obvious to one of ordinary skill in the art at the time of the invention to have further modified the Anderson device to have included the valve (32) provides fluid flow from the pump to the tank as called for in claim 12, in order to reduce operator fatigue.

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With regards to claim 13, Anderson shows the handle, and Fisher teaches the valve in the handle; thus it would have been obvious to one of ordinary skill in the art at the time of the invention to have further modified the Anderson device to have included the valve in the handle as called for in claim 13, in order to reduce operator fatigue.

With regards to claim 15; Fisher teaches the control device (34); thus it would have been obvious to one of ordinary skill in the art at the time of the invention to have further modified the Anderson device to have included the control device as called for in claim 15, in order to reduce operator fatigue.

With regards to claim 17, Anderson shows the handle.

With regards to claim 18; Fisher teaches the valve in the handle; thus it would have been obvious to one of ordinary skill in the art at the time of the invention to have further modified the Anderson device to have included the valve in the handle as called for in claim 18, in order to reduce operator fatigue.

2. Claims 14 and 16 are rejected under 35 U.S.C., 103(a) as being unpatentable over Anderson and Fisher as applied to claim 13 above, and further in view of Hancock (U.S. Patent number 6,142,171).

Anderson (as modified in view of Fisher) teaches all of the limitations of claim 13, from which these claims depend. Anderson and Fisher fail to teach the solenoid operated cartridge valves and control switches. Solenoid valves are well known, and are used in place of manual valves because they can be easier to operate and are more precise. Hancock shows solenoid operated cartridge valves.

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It would have been further obvious to one of ordinary skill in the art at the time of the invention to have further modified the Anderson device to have included solenoid operated cartridge valves and control switches as called for in claim 14 because they are easier to operate and are more precise.

With regards to claim 16; Fisher teaches the valve circulates fluid from the pump to the reservoir when the valves are not actuated; thus it would have been obvious to one of ordinary skill in the art at the time of the invention to have further modified the Anderson device (as modified in view of Fisher and Hancock) to have included valve circulates fluid from the pump to the reservoir when the switches are not actuated as called for in claim 16, in order to reduce wear on the motor.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Scott, et al. (U.S. Patent number 5,137,100); Nishimura, et al. (U.S. Patent number 4,856,264); Adams, et al. (U.S. Patent number 4,394,052); Mravyan (U.S. Patent number 5,890,772); Comer (U.S. Patent number 5,119,744); Wenzel (U.S. Patent number 4,787,195); Morrison (U.S. Patent number 4,645,264); and Ordonez (U.S. Patent number 5,741,047) teach similar machines with hydraulic drives.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Kreck whose telephone number is (703)308-2725. The examiner can normally be reached on 6:30-3:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Shackelford can be reached on (703)308-2978. The fax phone

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numbers for the organization where this application or proceeding is assigned are (703)305-3597 for regular communications and (703)305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)306-4177.

JJK
March 26, 2002


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